

CHAPTER 8

MOTOR VEHICLE MECHANIC REPAIR CATEGORIES

Section 8-1 REQUIREMENT

Section 10 of the *Motor Vehicle Service and Repair Act* (MCL 257.1310) establishes certain categories of mechanic certification. A mechanic may only perform repairs if certified in the category. Questions regarding motor vehicle mechanic repair category descriptions should be directed to:

Michigan Department of State
Bureau of Regulatory Services
Program Operations Division
Lansing, MI 48918

Telephone: 517/241-6850
Fax: 517/335-2810
E-mail: repair@michigan.gov

Section 8-2 AUTOMOBILE AND LIGHT TRUCK

8-2.1 Engine Repair. Diagnosis, service, and repair of the *internal* parts of the engine block and cylinder heads must be performed by a mechanic certified in Engine Repair (Auto).

- (a) **Requirements.** An Engine Repair mechanic may make all the *external* adjustments required to complete internal engine repairs. This includes adjustments of fuel and ignition systems, and related electrical components. The Engine Repair mechanic may remove and replace starting and charging system components in conjunction with Major Engine Repairs. See Table 8-1 for engine-related repairs that may also be performed by mechanics certified in other repair categories. Minor engine repairs which do not require certification are listed in Section 8-7.

- (b) **Exceptions.** The following cannot be performed under Engine Repair:

- (1) Overhaul of starters and alternators is the responsibility of mechanics certified in Electrical Systems (Auto);
- (2) Overhaul of fuel and ignition system components is the responsibility of mechanics certified in Engine Tune-up/Performance.

Table 8-1 Engine Repair Area to be Serviced	Other Acceptable Certification
Engine assembly (removal and replacement)	Engine Tune-up/Performance
Exhaust manifold	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)
Fan (electrical)	Engine Tune-up/Performance; Heating and Air Conditioning; Electrical Systems (Auto and Heavy-duty Truck)
Fan blade assembly	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)
Fan clutch	Engine Tune-up/Performance; Heating and Air Conditioning; Heavy-duty Truck Engine Repair (Gasoline and Diesel)
Flywheel	Manual Transmission, Front and Rear Drive Axles; Heavy-duty Truck Engine Repair (Gasoline and Diesel)
Flexplate	Automatic Transmission; Heavy-duty Truck Engine Repair (Gasoline and Diesel)
Freeze (core) plugs	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)
Front pulley, harmonic balancer and seal	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)
Fuel pump (electrical)	Engine Tune-up/Performance; Electrical Systems (Auto and Heavy-duty Truck); Heavy-duty Truck Engine Repair (Gasoline and Diesel)

Area to be Serviced	Other Acceptable Certification
Fuel pump (mechanical)	Engine Tune-up/Performance; Heavy-duty Truck Engine Repair (Gasoline and Diesel)
Intake manifold or gasket	Engine Tune-up/Performance
Rocker arms and push rods, except overhead cam engine	Engine Tune-up/Performance; Heavy-duty Truck Engine Repair (Gasoline and Diesel)
Tappet or rocker covers and gaskets	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)
Temperature control valve	Engine Tune-up/Performance; Electrical Systems (Auto); Heating and Air Conditioning; Heavy-duty Truck Engine Repair (Gasoline and Diesel)
Temperature gauges (sensors)	Engine Tune-up/Performance; Electrical Systems (Auto and Heavy-duty Truck); Heating and Air Conditioning; Heavy-duty Truck Engine Repair (Gasoline and Diesel)
Thermostat and water pump	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)
Timing belt and/or chain and gears	Engine Tune-up/Performance

8-2.2 Engine Tune-up/Performance. Preventative maintenance, driveability, diagnosis and repair of engine tune-up and performance components must be performed by mechanics certified in Engine Tune-up/Performance. This includes all engine ignition, fuel and emission control systems. Also included are diagnosis and replacement of related starting and charging system components. See Table 8-2 for related engine tune-up items that may be performed by mechanics certified in other repair categories.

- (a) **Additional Repairs.** An Engine Tune-Up/Performance mechanic may adjust or replace engine parts or components not requiring the removal of connecting rods, crankshafts, or camshafts from their bearings or journals. The Engine Tune-up/Performance mechanic may remove and replace timing belts, chains, gears and intake manifold gaskets.
- (b) **Exceptions.** Minor engine tune-up repairs, which do not require certification, are listed in Section 8-7. The following cannot be performed under Engine Tune-up/Performance:
 - (1) The tune-up/performance mechanic may *not* remove or replace cylinder heads or cylinder head gaskets;
 - (2) Overhaul of electrical components, including starters and alternators, is the responsibility of mechanics certified in Electrical Systems.

Table 8-2 Engine Tune-up/Performance Area to be Serviced	Other Acceptable Certification
Fuel injection and induction	Engine Repair (Auto); Heavy-duty Truck Engine Repair (Gasoline and Diesel)
Vapor control canister or filter	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)

8-2.3 Front End, Suspension and Steering Systems. Diagnosis, service, repair and adjustment of front end, suspension and steering systems must be performed by mechanics certified in Front End, Suspension and Steering Systems (Auto). See Table 8-3 for related items that may also be performed by mechanics certified in other repair categories. Minor repairs which do not require certification are listed in Section 8-7.

Table 8-3 Front End, Suspension and Steering Systems Area to be Serviced	Other Acceptable Certification
Stabilizer bushings and links	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)
Wheel bearing seals, wheel bearings, wheel hubs and studs	Brakes and Braking Systems (Auto and Heavy-duty Truck); Automatic Transmission; Manual Transmission, Front and Rear Drive Axles; Heavy-duty Truck Drive Train; Heavy-duty Truck Suspension and Steering Systems

8-2.4 Brakes and Braking Systems. Diagnosis, service, repair and adjustment of components in the braking system must be performed by mechanics certified in Brakes and Braking Systems (Auto). See Table 8-4 for related items that may also be performed by mechanics certified in other repair categories. Minor brake repairs which do not require certification are listed in Section 8-7.

Table 8-4 Brakes and Braking Systems Area to be Serviced	Other Acceptable Certification
Wheel bearing seals, wheel bearings, wheel hubs and studs	Front End, Suspension and Steering Systems (Auto); Automatic Transmission; Manual Transmission, Front and Rear Drive Axles; Heavy-duty Truck Drive Train; Heavy-duty Truck Suspension and Steering Systems; Heavy-duty Truck Brakes and Braking Systems
Parking brake (any service which can be done without removal of drum or rotor)	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)

8-2.5 Automatic Transmission. Diagnosis, service, repair and adjustment of automatic transmissions must be performed by mechanics certified in Automatic Transmission. See Table 8-5 for related transmission repair items that may also be performed by mechanics certified in other repair categories. Minor automatic transmission repairs which do not require certification are listed in Section 8-7.

Table 8-5 Automatic Transmission Area to be Serviced	Other Acceptable Certification
Cooler lines and auxiliary coolers	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)
Extension housing, bushing or seal	Engine Repair (Auto); Manual Transmission, Front and Rear Drive Axles; Heavy-duty Truck Engine Repair (Gasoline and Diesel); Heavy-duty Truck Drive Train
External kickdown switch	Engine Tune-up/Performance; Electrical Systems (Auto and Heavy-duty Truck)
External manual valve linkage	Engine Repair (Auto); Engine Tune-up/Performance; Heavy-duty Truck Engine Repair (Gasoline and Diesel); Heavy-duty Truck Drive Train
External throttle valve linkage	Engine Repair (Auto); Engine Tune-up/Performance; Heavy-duty Truck Engine Repair (Gasoline and Diesel)

Area to be Serviced	Other Acceptable Certification
Filler tube O-ring	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)
Flexplate	Engine Repair (Auto); Heavy-duty Truck Engine Repair (Gasoline and Diesel)
Neutral switch	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)
Speedometer driven gear	Manual Transmission, Front and Rear Drive Axles; Electrical Systems (Auto and Heavy-duty Truck)
Transmission modulator	Engine Repair (Auto); Engine Tune-up/Performance

8-2.6 Manual Transmission, Front and Rear Drive Axles. Diagnosis, service, repair and adjustment of manual transmissions, clutches, drive shafts, differential assemblies and axle assemblies, and related suspension components must be performed by mechanics certified in Manual Transmission, Front and Rear Drive Axles. See Table 8-6 for items that may also be serviced by mechanics certified in other repair categories. Minor repairs which do not require certification are listed in Section 8-7.

Alignment of axle and/or suspension components must be performed by mechanics certified in Front End, Suspension and Steering Systems (Auto).

Table 8-6 Manual Transmission, Front and Rear Drive Axles Area to be Serviced	Other Acceptable Certification
Axle bearings and hubs	Front End, Suspension and Steering Systems (Auto); Brakes and Braking Systems (Auto); Heavy-duty Truck Engine Repair (Gasoline and Diesel)
Clutch (in conjunction with major engine repairs)	Engine Repair (Auto); Heavy-duty Truck Engine Repair (Gasoline and Diesel)
Rear control arms	Front End, Suspension and Steering Systems (Auto)
*Removal and reinstallation of drive shafts and drive axles in conjunction with other repairs	Engine Repair (Auto); Front End, Suspension and Steering Systems (Auto); Automatic Transmission

Area to be Serviced	Other Acceptable Certification
Shift linkage (external)	Engine Repair (Auto); Engine Tune-up/ Performance; Automatic Transmission

*Decisions concerning the repair or replacement of drive shafts and drive axles can only be made by mechanics certified in Manual Transmission, Front and Rear Drive Axles.

8-2.7 Electrical Systems. Diagnosis, service, repair and adjustment of electrical systems must be performed by mechanics certified in Electrical Systems (Auto). A mechanic who is certified in another area of repair may also work on the electrical components and circuits which are directly interrelated to the repair of components within the category in which the mechanic is certified. A list of minor electrical system repairs which do not require certification is listed in Section 8-7.

8-2.8 Heating and Air Conditioning. Diagnosis, service, repair and adjustment of heating and air conditioning systems must be performed by mechanics certified in Heating and Air Conditioning. See Table 8-7 for related heating and air conditioning repair items that may also be performed by mechanics certified in other repair categories. Minor heating and air conditioning repairs which do not require certification are listed in Section 8-7.

Table 8-7 Heating and Air Conditioning Area to be Serviced	Other Acceptable Certification
Blower motors and switches	Electrical Systems (Auto)
*Detach compressor or other air conditioning components without discharging the refrigerant system	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)
Fan (electrical)	Engine Repair (Auto); Engine Tune-up/ Performance; Electrical Systems (Auto and Heavy-duty Truck)
Fan blade assembly	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)
Fan clutch	Engine Tune-up/Performance; Heavy-duty Truck Engine Repair (Gasoline and Diesel)
In-car temperature sensor	Electrical Systems (Auto)
Temperature control	Electrical Systems (Auto)
Temperature control valve	Engine Repair (Auto); Engine Tune-up/ Performance

Area to be Serviced	Other Acceptable Certification
Temperature gauges	Engine Repair (Auto); Engine Tune-up/ Performance; Electrical Systems (Auto and Heavy-duty Truck)
Thermostat or water pump	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)

*Charging of the air conditioning system must be performed by mechanics certified in Heating and Air Conditioning.

8-2.9 Collision-related Mechanical Repair. Mechanics certified in Collision-related Mechanical Repair may remove and replace motor vehicle components which are clearly damaged by collision. The diagnosis, repair or overhaul of mechanical components must be performed by mechanics certified in the appropriate repair categories. A mechanic certified in Collision-related Mechanical Repair may disconnect other vehicle components in order to gain access to the collision-damaged components. Minor collision-related repairs which do not require certification are listed in Section 8-7. The following cannot be performed under Collision-related Mechanical Repair:

- (a) Charging of air conditioning systems must be performed by mechanics certified in Heating and Air Conditioning;
- (b) Wheel alignment must be performed by mechanics certified in Front End, Suspension and Steering Systems.

8-2.10 Unitized Body Structural Repair. Persons who diagnose, repair or replace components which affect the structural integrity of a unitized body vehicle must be certified in Unitized Body Structural Repair. This includes persons who diagnose (estimate) the extent of work needed to repair damaged structural components. Minor repairs which do not require certification are listed in Section 8-7.

- (a) These structural components are:
 - (1) Aprons;
 - (2) Cowl panel;
 - (3) Cross members;
 - (4) Floor pans;
 - (5) Front rails;
 - (6) Front strut towers;
 - (7) Pillars;
 - (8) Quarter panels;
 - (9) Radiator core support;
 - (10) Rear rails;
 - (11) Rear strut towers;
 - (12) Rocker panels;
 - (13) Roof panel;
 - (14) Upper and lower rails;

(15) Wheelhouse panels.

- (b) **Other Information.** Removing a dent from a roof or quarter panel is not viewed as “affecting the structural integrity of the vehicle” and does not require certification. Sectioning or replacement of the roof panel or quarter panel requires the person performing the repair to be certified in Unitized Body

Structural Repair. Repair or replacement of a bolt-on component, such as a hood, fender, door, deck lid, hatch or bumper, does not require certification.

- (c) **Exceptions.** The following cannot be performed under Unitized Body Structural Repair:

- (1) A person who removes mechanical components to gain access to a damaged area or replaces mechanical parts damaged as a result of a collision must be certified in Collision-related Mechanical Repair. This includes persons who remove or replace dash or air bag components;
- (2) Charging of air conditioning systems must be performed by mechanics certified in Heating and Air Conditioning. Wheel alignment must be performed by mechanics certified in Front End, Suspension and Steering Systems.

8-2.11 PRE-1973 VEHICLE REPAIR.

Mechanics who are engaged exclusively in the repair of vehicles manufactured before 1973 may be certified in the specialty category of Pre-1973 Vehicles. This also applies to mechanics who are engaged in the reconditioning, replacement, adjustment, or alteration of the operating condition of pre-1973 vehicles. Mechanics currently certified in other appropriate categories may also work on pre-1973 vehicles.

- (a) **Exceptions.** Minor repairs that do not require certification are listed in Section 8-10. The following cannot be performed under Pre-1973 Vehicles:

- (1) The pre-1973 vehicle mechanic may *not* perform unitized body structural repairs. This is the responsibility of mechanics certified in Unitized Body Structural Repair.

Special Note: The Pre-1973 Vehicles “specialty category” will *not* reinstate an individual’s “Master” status, nor does it contribute to “Master” status or upgrade a currently expired recertification category. The Pre-1973 Vehicles category is *not* necessary for a Master Mechanic certificate.

Section 8-3

HEAVY-DUTY TRUCKS OVER 10,000 POUNDS G.V.W.

8-3.1 Heavy-duty Truck Gasoline Engine Repair. Preventive maintenance, diagnosis and repair of gasoline engines in trucks over 10,000 pounds G.V.W. must be performed by mechanics certified in Heavy-duty Truck Gasoline Engine Repair. Diagnosis, removal and replacement of related starting and charging systems may also be performed by mechanics certified in Heavy-duty Truck Gasoline Engine Repair. See Table 8-8 for related items that may also be performed by mechanics certified in other repair categories.

Minor gasoline engine repairs which do not require certification are listed in Section 8-7. Overhaul of electrical components, including starters, alternators and generators, is the responsibility of mechanics certified in Heavy-duty Truck Electrical Systems.

Table 8-8 Heavy-duty Truck Gasoline Engine Repair Area to be Serviced	Other Acceptable Certification
Cylinder head gasket	Engine Repair (Auto); Heavy-duty Truck Engine Repair (Diesel)
Exhaust manifold	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)
Flywheel or flexplate	Heavy-duty Truck Drive Train
Fan clutch	Engine Repair (Auto); Heating and Air Conditioning; Heavy-duty Truck Engine Repair (Diesel)
Freeze (core) plugs	Engine Repair (Auto); Engine Tune-up/Performance; Heating and Air Conditioning; Heavy-duty Truck Engine Repair (Diesel)
Ignition system	Engine Repair (Auto); Engine Tune-up/Performance; Electrical Systems (Auto and Heavy-duty Truck)
Front or rear pulley or harmonic balancer	Any Heavy-duty Truck certification (except Collision-related Mechanical Repair)
Fuel pump	Engine Repair (Auto); Engine Tune-up/Performance; Heavy-duty Truck Engine Repair (Diesel)

Area to be Serviced	Other Acceptable Certification
Oil pan and gaskets	Any Heavy-duty Truck certification (except Collision-related Mechanical Repair)
Rocker arms and push rods	Engine Repair (Auto); Engine Tune-up/Performance; Heavy-duty Truck Engine Repair (Diesel)
Tappet or rocker covers and gaskets	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)
Heater water valve	Engine Tune-up/Performance; Heating and Air Conditioning; Heavy-duty Truck Engine Repair (Diesel)
Temperature gauge units	Electrical Systems (Auto and Heavy-duty Truck)
Thermostat	Any Heavy-duty Truck certification (except Collision-related Mechanical Repair)
Water pump	Any Heavy-duty Truck certification (except Collision-related Mechanical Repair)

8-3.2 Heavy-duty Truck Diesel Engine Repair. Diagnosis, service, repair and adjustment of diesel engines in trucks over 10,000 pounds G.V.W. must be performed by mechanics certified in Heavy-duty Truck Diesel Engine Repair. The diagnosis and repair of related starting and charging systems may also be performed by certified Heavy-duty Truck Diesel Engine Repair mechanics. See Table 8-9 for related diesel engine repair items that may also be performed by mechanics certified in other repair categories.

Minor repairs which do not require certification are listed in Section 8-7. Overhaul of electrical components, including starters, alternators and generators, is the responsibility of mechanics certified in Heavy-duty Truck Electrical Systems.

Table 8-9 Heavy-duty Truck Diesel Engine Repair Area to be Serviced	Other Acceptable Certification
Air starters	Heavy-duty Truck Brakes and Braking Systems; Electrical Systems (Auto and Heavy-duty Truck)
Exhaust manifolds	Any Heavy-duty Truck certification (except Collision-related Mechanical Repair)
Fan clutch	Engine Repair (Auto); Heating and Air Conditioning; Heavy-duty Truck Engine Repair (Gasoline)

Area to be Serviced	Other Acceptable Certification
Flywheel	Heavy-duty Truck Engine Repair (Gasoline); Heavy-duty Truck Drive Train
Freeze (core) plugs	Engine Repair (Auto); Engine Tune-up/Performance; Heating and Air Conditioning; Heavy-duty Truck Engine Repair (Gasoline)
Front pulley or harmonic balancer	Any Heavy-duty Truck certification (except Collision-related Mechanical Repair)
Oil pan and gaskets	Any Heavy-duty Truck certification (except Collision-related Mechanical Repair)
Valve rockers and push rods	Engine Repair (Auto); Engine Tune-up/Performance; Heavy-duty Truck Engine Repair (Gasoline)
Tappet or rocker covers and gaskets	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)
Temperature gauge or pyrometer units	Electrical Systems (Auto and Heavy-duty Truck)
Thermostat	Any Heavy-duty Truck certification (except Collision-related Mechanical Repair)
Water pump	Any Heavy-duty Truck certification (except Collision-related Mechanical Repair)

8-3.3 Heavy-duty Truck Drive Train. Diagnosis, service, repair and adjustment of transmissions, clutches, propeller shafts and driving axle assemblies in vehicles over 10,000 pounds G.V.W. must be performed by mechanics certified in Heavy-duty Truck Drive Train. See Table 8-10 for items that may also be serviced by mechanics certified in other repair categories. Minor repairs which do not require certification are listed in Section 8-7.

Table 8-10 Heavy-duty Truck Drive Train Area to be Serviced	Other Acceptable Certification
Air shift components	Heavy-duty Truck Brakes and Braking Systems
Clutch (in conjunction with major engine repairs)	Heavy-duty Truck Engine Repair (Gasoline and Diesel)
Drive shaft and universal joints	Heavy-duty Truck Engine Repair (Gasoline and Diesel); Heavy-duty Truck Suspension and Steering Systems

Area to be Serviced	Other Acceptable Certification
Shift linkage (mechanical)	Heavy-duty Truck Engine Repair (Gasoline and Diesel)
Torque converter planetary transmissions	Automatic Transmission
Transmission mounts	Any Auto or Heavy-duty Truck certification (except Collision-related Mechanical Repair or Unitized Body Structural Repair)

8-3.4 Heavy-duty Truck Brakes and Braking Systems. Diagnosis, service, repair and adjustment of components in the braking systems on trucks over 10,000 pounds G.V.W. must be performed by mechanics certified in Heavy-duty Truck Brakes and Braking Systems. See Table 8-11 for related brake repair items that may also be performed by mechanics certified in other repair categories. Minor brake repairs which do not require certification are listed in Section 8-7.

Table 8-11 Heavy-duty Truck Brakes and Braking Systems Area to be Serviced	Other Acceptable Certification
Air compressors	Heavy-duty Truck Engine Repair (Gasoline and Diesel)
Brake electrical instrumentation (visual and audio warning devices and gauges)	Heavy-duty Truck Electrical Systems
Electric trailer brakes	Recreational Trailer
Grease seals	Heavy-duty Truck Drive Train
Hydraulic brake systems	Brakes and Braking Systems (Auto)
Transmission or drive shaft mounted parking brakes	Heavy-duty Truck Drive Train
Wheel bearings	Heavy-duty Truck Drive Train; Heavy-duty Truck Suspension and Steering Systems
Wheel hubs	Heavy-duty Truck Drive Train; Heavy-duty Truck Suspension and Steering Systems
Wheel studs	Heavy-duty Truck Drive Train; Heavy-duty Truck Suspension and Steering Systems

8-3.5 Heavy-duty Truck Suspension and Steering Systems. Diagnosis, service, repair and adjustment of suspension and steering systems of vehicles over 10,000 pounds G.V.W. must be performed by mechanics certified in Heavy-duty Truck Suspension and Steering Systems. See Table 8-12 for related items that may also be performed by mechanics certified in other repair categories. Minor suspension and steering repairs which do not require certification are listed in Section 8-7.

Table 8-12 Heavy-duty Truck Suspension and Steering Systems Area to be Serviced	Other Acceptable Certification
Air suspension system	Heavy-duty Truck Brakes and Braking Systems
Driving axle suspension	Heavy-duty Truck Drive Train
Torsion bars	Heavy-duty Truck Drive Train; Heavy-duty Truck Brakes and Braking Systems
Towed vehicle suspension	Heavy-duty Truck Brakes and Braking Systems
Wheel bearings, wheel hub and wheel studs	Heavy-duty Truck Drive Train; Heavy-duty Truck Brakes and Braking Systems

8-3.6 Heavy-duty Truck Electrical Systems. Diagnosis, service, repair and adjustment of electrical systems on trucks over 10,000 pounds G.V.W. must be performed by mechanics certified in Heavy-duty Truck Electrical Systems. A mechanic who is certified in another area of repair may also work on the electrical components and circuits which are directly interrelated to the repair of components within the category in which the mechanic is certified. Minor electrical system repairs which do not require certification are listed in Section 8-7.

8-3.7 Heavy-duty Truck Collision-related Mechanical Repair. Mechanics certified in Heavy-duty Truck Collision-related Mechanical Repair may remove and replace motor vehicle components which are clearly damaged by collision. Diagnosis, repair or overhaul of mechanical components must be performed by mechanics certified in the appropriate repair categories. A mechanic certified in Heavy-duty Collision-related Mechanical Repair may disconnect other vehicle components in order to gain access to the collision-damaged components. Minor repairs which do not require certification are listed in Section 8-7.

The following cannot be performed under Collision-related Mechanical Repair:

- (a) Charging of air conditioning systems must be performed by mechanics certified in Heating and Air Conditioning;
- (b) Wheel alignment must be performed by mechanics certified in Suspension and Steering Systems.

Section 8-4

MOTORCYCLE

Diagnosis, service, repair and adjustment of motorcycles and component parts, including engine and fuel systems, electrical systems, braking systems, drive train and chassis, must be performed by mechanics certified in Motorcycle Repair. A list of minor repairs which do not require certification is listed in Section 8-7.

Section 8-5

RECREATIONAL TRAILER

8-5.1 Definition. A recreational trailer is a travel trailer, camper trailer or other special purpose or utility trailer used on the highway and towed by an automobile or light truck with a gross towing weight of less than 10,000 pounds.

8-5.2 Conditions. Diagnosis, service, repair and adjustment of the mechanical, electrical and suspension components, including brakes, axles, bearings and springs of the recreational trailer, may be performed by mechanics certified in Recreational Trailer repair. Minor repairs which do not require certification are listed in Section 8-7. See Table 8-13 for items that may also be serviced by mechanics certified in other repair categories:

Table 8-13 Recreational Trailer Area to be Serviced	Other Acceptable Certification
Trailer brakes	Brakes and Braking Systems (Auto and Heavy-duty Truck)
Trailer electrical systems	Electrical Systems (Auto and Heavy-duty Truck)
Wheel bearing seals, wheel bearings, wheel hubs and studs	Front End, Suspension and Steering Systems (Auto); Brakes and Braking Systems (Auto and Heavy-duty Truck); Automatic Transmission; Manual Transmission, Front and Rear Drive Axles; Heavy-duty Truck Drive Train; Heavy-duty Truck Suspension and Steering

Section 8-6

MECHANIC CERTIFICATION REQUIREMENTS INVOLVING SUBLET REPAIRS

When vehicles or major components are sublet to another repair facility for repair, the requirement to have the sublet repairs performed by a certified mechanic applies as follows:

- (a) When the *vehicle* is sublet to another facility for major repairs:
 - (1) The second facility must employ, and have the repairs performed by, a properly certified mechanic;
 - (2) If the first facility diagnosed the need for repair, the name and certification number of the diagnosing mechanic must appear on the customer's invoice, along with the name and certification number of the mechanic who actually performed the repairs.
- (b) When a component, such as an engine or a transmission, is sublet to another facility for repairs:
 - (1) The facility that removed the part must employ a properly certified mechanic to diagnose, remove or reinstall the part;
 - (2) The names and certification numbers of the mechanics who diagnosed, removed or reinstalled the part must appear on the final invoice given to the customer.

Section

8-7

MINOR REPAIRS

Replacement, adjustment, repair or servicing of the following parts and assemblies are considered minor repairs. Mechanic certification is not required.

- (a) Air cleaner element;
- (b) Air conditioner compressor belts;
- (c) Air pump belt;
- (d) Air pump hose;
- (e) Antifreeze, installing, changing or otherwise servicing the coolant;
- (f) Automatic door lamp switch;
- (g) Battery;
- (h) Battery ground cable;
- (i) Battery hold-down strap;
- (j) Battery positive cable;
- (k) Battery-to-starter relay cable;
- (l) Body repairing, except for unitized body structural repair;
- (m) Crankcase vent air cleaner;
- (n) Crankcase vent air cleaner hose;
- (o) Engine oil filter;
- (p) Exhaust pipe, muffler, catalytic converter, tail pipe and associated attaching parts;
- (q) Fan and alternator drive belts;
- (r) Fuel filter;
- (s) Fuel line flex hoses or lines;
- (t) Fuel tank, except for those tanks that contain a fuel pump;

- (u) Fuses;
- (v) Headlamp foot dimmer;
- (w) Heater hoses;
- (x) Horns;
- (y) Idler pulley, adjust only;
- (z) Ignition coil output wire; (aa) Light bulbs and headlamps; (bb) Motor and transmission mounts;

- (cc) Ornamental accessories;

- (dd) Positive crankcase ventilation control valve (pcv);

- (ee) Power steering pump belt;

- (ff) Radiators;

- (gg) Radiator hoses, upper and lower;

- (hh) Radiator reserve tank;

- (ii) Rear springs, leaf or coil, except MacPherson strut type assemblies;

- (jj) Shock absorbers which are not built in combination with other parts of the suspension;

- (kk) Speedometers;

- (ll) Vapor canister hoses;

- (mm) Wheels, except alignment;

- (nn) Windshield washer hose;

- (oo) Windshield washer tank;

- (pp) Wiper blades.